UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,961	10/27/2000	Derek Sellin	781.381USW1	5058

32294	7590	06/29/2004

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EXAMINER
SHAH, CHIRAG G

ART UNIT	PAPER NUMBER
2664	8

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _03 April 2004_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-13_ is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-13_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
   application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

  a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-3 and 5-13 rejected under 35 U.S.C. 103(a) as being unpatentable over

Suonvieri (WO 95/01015) in view of Hoffpauir (Reg. Number: H1, 918).

Referring to claim 1, Suonvieri discloses in figure 6 of a method of connecting network

elements to a radio system comprising one or more network elements (601 and 602), a base

station controller (600) and in which system information between the network elements is

transmitted in frames that are divided into time slots as disclosed in figures 4, 5 and 7 and claim

1, and in which system the base station controller (600) controls one or more network elements,

and network element identification information has been fed into a network element to be

installed, and in which method the network element is physically connected to the system by

means of the telecommunication connections, wherein the frames used by the base station

controller (600) for communication with the network elements, unused consecutive time slots

(305 and 402) of the frames being divided into one group (303 or 304), and each group having

one time slot (as disclosed in figure 5) used as a communication channel as regards time slot

allocation from the group, and the base station controller (600) allocating necessary

telecommunication capacity (as disclosed in figure 5) for the use of communication between the

network element and the base station controller, and the allocated telecommunication capacity

being branched by software (a network configuration entity as shown in figure 6) through the

telecommunication connections to the network element. Suonvieri discloses in figure 6 of a

network configuration entity 604 that controls transmission of configurations data to the base

stations, but fails to explicitly include a network management system (300) that are operatively

interconnected by means of telecommunication connections comprising traffic channels and

control channels. Hoffpauir discloses in figure 1 of the integration of a traditional wireless

system including BSC 50 that is operatively integrated to a network management system by

means of telecommunication connections. Therefore, it would have been obvious to one of

ordinary skill in the art to modify the teachings of Suonvieri to include an NMS in order to

perform operations and maintenance as well as managing and monitoring the operations of the

BSC and the one or more BTS.

Referring to claims 2 and 11, Suonvieri discloses a radio system comprising one or more

network elements (601,602), a base station controller (600) and in which system information

between the network elements (601,602) is transmitted in frames that are divided into time slots

as disclosed in figures 4, 5 and 7 and claim, and in which system the base station controller (600)

controls one or more network elements that comprise network element identification information

(based on information in 604), whereby in frames arranged to be used by the base station

controller (600) for communication with the network elements (601,602), unused consecutive

time slots (305 and 402) of the frames being divided into one or more groups (303,304), and

each group having one time slot (as disclosed in figure 5) used as a communication channel as

regards time slot allocation from said group, and predetermining identification information for

the base station controller about network elements allowed to be connected to the base station

controller (as disclosed on page 9, lines 5-31), and after being physically installed, the network

element to be installed being arranged to search the frames received by means of the

telecommunication connections for the communication channels of the groups and to identify

free groups by means of the communication channels found (as disclosed in figures 3-6,

specifically in figure 5), and the network element (601,602) being arranged to transmit over the

communication channel of the group its identification information and hardware information to

the base station controller (via the Abis network and manages to establish a connection since it

uses a predetermined channel as disclosed on page 10, lines 1-25) being arranged to compare the

identification information with the identification information about the allowed network

elements, and when the identification information is allowed, to accept the network element as in

figure 6, and the base station controller being arranged to allocate from the group necessary time

slots for the use of communication between the network element and the base station controller

and to inform the network element of the allocated time slots (as disclosed in figure 5 and 6), and

the allocated time slots being branched by software through the telecommunication connections

to the network elements (as disclosed in figure 6 via network configuration entity 604).

Suonvieri discloses in figure 6 of a network configuration entity 604 that controls transmission of

configurations data to the base stations, but fails to explicitly include a network management

system (300) that are operatively interconnected by means of telecommunication connections

comprising traffic channels and control channels. Hoffpauir discloses in figure 1 of the

integration of a traditional wireless system including BSC 50 that is operatively integrated to a

network management system by means of telecommunication connections. Therefore, it would

have been obvious to one of ordinary skill in the art to modify the teachings of Suonvieri to

include an NMS in order to perform operations and maintenance as well as managing and

monitoring the operations of the BSC and the one or more BTS.

Referring to claim 3 and 12, Suonvieri discloses in figure 6 of network elements 601 and

602 of the radio system being interconnected coupled in series and also discloses that the

configuration data is placed in series of timeslots marked with an identifier, thus implying that

that the base station controller (600) would reject the network element if its identification infor-

mation does not exist among the identification information on the allowed network elements as

claims.

Referring to claim 5, Suonvieri discloses in figure 6 wherein some network elements (601

and 602) of the radio system being interconnected coupled in series by means of the

telecommunication connections as claim.

Referring to claim 6, Suonvieri discloses a method as claimed in claim 5, wherein the

unused-time-slot groups as disclosed in figures 3 and 4 being transmitted by software (network

configuration entity 604 as disclosed in figure 6) as whole groups in the frames to network

elements (601 and 602) that are connected to the base station controllers (600) by

telecommunication connections capable of the transmission as claim.

Referring to claim 7, Suonvieri discloses on page 5 lines 7 to page 6, lines 7 and in figure

3 and 4 and respective portion of the specification, wherein even when faults and malfunctions

occurs, the structure of the base station is easy to control such that the structure of the base

station an be displayed on the BSC and the configuration of the network can be easily changed

form one point in the network. Thus implying that information on the unused-time-slot groups

may be manually set into network elements that are connected to the base station controllers by

telecommunication connections incapable of transmission by software (when malfunction

occurs) as claim.

Referring to claim 8, Suonvieri discloses in figures 3-6 and respective portion of the

specification, wherein the network element to be installed, after searching the frames received by

means of the telecommunication connections for the communication control channels of the

groups, searching the telecommunication connections for routes to the network elements which

comprise unused-time-slot groups (as disclosed in figure 5) whole groups in the frames as

claims.

Referring to claim 9, Suonvieri discloses in figure 6 a method as claimed in claim 1,

wherein the network elements (601 and 602) being the base stations of the system.

Referring to claim 10, Suonvieri discloses in figure 9 and on page 12, lines 16-35 of a

method as claimed in claim 1, wherein the communication control channel of each group being a

last time slot in the group as claim.

3.   Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Suonvieri in view of

Hoffpauir as applied to claims 1-3 and 5-13 above, and further in view of Poon et al. (U.S. Patent

No. 5,940,380).

Referring to claim 4 and 14, Suonvieri in view of Hoffpauir fails to disclose a method,

wherein the network element selecting another base station controller group communication

channel when the base station controller rejects the network element, and the network element

transmitting its identification information and hardware information over the communication

channel to another base station controller, and the network element repeating this procedure until

a base station controller accepts the network element. Poon et al discloses in figure 1 and respective portions of the specification that when the mobile station MS1 moves during the call into another cell C4, BST1 (which is controlled by BSC1) rejects, the network element and the MS1 must get a new dedicated communication channel, which must be allocated in the new cell (which includes BST4 being controlled by BSC2). Therefore, it would have been obvious to one of ordinary skill in the art to modify the teachings of Suonvieri in view of Hoffpauir to include the teaching of Poon et al in order to efficiently maintain the established call.

Response to Arguments

4.   Applicant's arguments filed 4/3/04 have been fully considered but they are not persuasive.

5.   In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., In the response on page 9, the base station controller **automatically** creates one time slot for each group, and the time slot is used as a communication control channel with respect to time slot allocation from the group are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Referring to claims 1, 2, 6 and 11, Applicant argues that Suonvieri does not disclose or suggest dividing unused consecutive time slots into transmission groups. Applicant also argues that references do not teach or suggest capacity allocation of a telecommunication system and thus also fails to discloses the elements of the claims. Examiner respectfully disagrees and

directs applicant to (Suonvieri reference) the abstract and figure 6 and respective portions of the

specification where BSC and base stations are connected in series via data transmission links and

where data is transmitted over the data transmission links in frames divided in time slots, the

BSC includes a network configuration entity 604 that enables the BSC to transmit configuration

data to the base station. Furthermore, in figure 6 and in column 5, lines 24-61, Suonvieri further

states BSC transmits to base station the configuration data comprising the list of Abis timeslots

intended for the first base station and data for other base stations about cross connection of

timeslots intended to be performed by that particular base station. In addition, as disclosed in

figure 3-5 and respective portions of the specification, that the unused consecutive time slots

(305 and 402) of the frames are being divided into one group (BST2 Calls 303 or BST3 Calls

304), and each group having one time slot (as disclosed in figure 5) used as a communication

channel as time slot allocation from the group. Furthermore, Suonvieri discloses in figure 5 of

allocating necessary telecommunications capacity for use of communication between the

network elements (base stations) and the base station controller. Therefore, Claims 1, 2, 6, and

11 stands rejected based on the teachings and/or suggestions recited by the Prior Art of record.

Referring to claims 3, 12, and 14, Applicant argues that the combination of Suonvieri and

Hoffpauir does not contain the limitation that the base station controller rejects the network

element if its identification information does not exist among the identification on the allowed

network elements. Examiner respectfully disagrees because Suonvieri discloses in figure 6 that

network elements 601 and 602 of the radio system as being interconnected and coupled in series

and also discloses that the configuration data (via network configuration entity 604 within the

BSC) is placed in series of timeslots marked with an identifier by the BSC, thus indicating that if

the configuration data does not include identification information (among the identification

information on the allowed network elements), the BSC would reject the network element.

Furthermore, Applicant argues that the solution recited in the pending claims is more suitable for

larger systems than the one taught in Suonvieri. Applicant is reminded that as long as the Prior

Art of record discloses the limitation as recited in the application and if the prior art structure is

capable of performing the intended use, then it meets the claim. Thus, claims 3, 12, and 14

remain rejected based on the teachings and/or suggestions recited by the Prior Art of record.

Referring to claim 4, Applicant argues that the combination of Suonvieri, Hoffpauir and

Poon does not disclose or suggest the BSC rejects network elements on the basis of the

identification information of the element. Examiner respectfully disagrees based on the same

reasons provided in the previous paragraph of this section. In addition, claim 4 stands rejected

since the limitation is addressed by the Prior Art of record and as a result of claim 2 remaining

rejected.

Any response to this final action should be mailed to:

Box AF
> Commissioner of Patents and Trademarks
> Washington, D.C. 20231

Or faxed to:

> (703)305-9051, (for formal communications; please mark "EXPEDITED
> PROCEDURE)

Or:

> (703)305-5403 (for informal or draft communications, please label "PROPOSED"
> or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal
Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag G Shah whose telephone number is 703-305-5639. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cgs
June 18, 2004

Ajit Patel
Primary Examiner